

Docket Number: 018984-0305363

PATENT APPLICATION

Client Reference:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of

MICHAEL DAVID MAX, et al.

Group Art Unit:

CIP of Application No.: 10/266,258 et al.

Examiner: (Unknown)

Filed herewith: September 8, 2003

Confirmation No.:

For: HYDRATE-BASED DESALINATION WITH HYDRATE-ELEVATING DENSITY-DRIVEN CIRCULATION

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

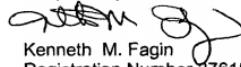
Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Although the various references were cited by or submitted to the Office in the various parent applications which are relied upon for an earlier filing date under 35 U.S.C. §120 and therefore do not need to be resubmitted pursuant to 37 C.F.R. §1.98(d), copies of non-U.S.-Patent references are being submitted herewith for the Examiner's convenience.

English-language Abstracts of the non-English language references are also attached hereto.

Respectfully Submitted,



Kenneth M. Fagin
Registration Number 37615

Date: September 8, 2003
PILLSBURY WINTHROP LLP
Telephone: (703) 905-2000
Facsimile: (703) 905-2500
P.O. Box 10500
McLean, VA 22102

| | | |
|-------------------|--------|-------------|
| Atty. Dkt. No. | M# | Client Ref. |
| | 305363 | |

**INFORMATION DISCLOSURE STATEMENT
 BY APPLICANT**

Date: September 8, 2003

Page of

Applicant: MAX et al.

Appln. No.: New/Herewith

Filing Date: September 8, 2003

Examiner: Group Art Unit:

U.S. PATENT DOCUMENTS

| Examiner's Initials* | | Document Number | Date MM/YYYY | Name (Family Name of First Inventor) | Class | Sub Class | Filing Date (if appropriate) |
|----------------------|--|-----------------|--------------|--------------------------------------|-------|-----------|------------------------------|
| AR | | 0,135,001 | 01/1873 | MEYLER | | | |
| BR | | 2,904,511 | 09/1959 | DONATH | | | |
| CR | | 2,974,102 | 03/1961 | WILLIAMS | | | |
| DR | | 3,027,320 | 03/1962 | BUCHANAN | | | |
| ER | | 3,119,771 | 01/1964 | COTTLE | | | |
| FR | | 3,119,772 | 01/1964 | HESS ET AL | | | |
| GR | | 3,126,334 | 03/1964 | HARLOW | | | |
| HR | | 3,132,096 | 05/1964 | WALTON | | | |
| IR | | 3,148,143 | 09/1964 | DONATH | | | |
| JR | | 3,155,610 | 11/1964 | WILLIAMS | | | |
| KR | | 3,171,727 | 03/1965 | BROWN ET AL | | | |
| LR | | 3,214,371 | 10/1965 | TUWINER | | | |
| MR | | 3,217,505 | 11/1965 | TUWINER | | | |
| NR | | 3,243,966 | 04/1966 | GLEW | | | |
| OR | | 3,308,063 | 03/1967 | HESS ET AL. | | | |
| PR | | 3,350,299 | 10/1967 | HESS ET AL. | | | |
| QR | | 3,350,300 | 10/1967 | HESS ET AL. | | | |
| RR | | 3,371,035 | 2/1968 | JACOBS ET AL. | | | |
| SR | | 3,675,436 | 07/1972 | GANIARIS | | | |
| TR | | 3,712,075 | 01/1973 | SMITH ET AL. | | | |
| UR | | 3,813,892 | 06/1974 | JOHNSON | | | |
| VR | | 3,856,492 | 12/1974 | KLASS | | | |
| WR | | 3,892,103 | 07/1975 | ANTONELLI | | | |
| XR | | 3,983,032 | 09/1976 | HESS ET AL. | | | |
| YR | | 3,992,170 | 11/1976 | KARNOFSKY | | | |
| ZR | | 4,170,328 | 10/1979 | KIRK ET AL. | | | |
| AAR | | 4,207,351 | 06/1980 | DAVIES | | | |
| BBR | | 4,267,022 | 05/1981 | PITCHER | 203 | 100 | |
| CCR | | 4,278,465 | 06/1981 | MCGREW | | | |
| DDR | | 4,278,645 | 07/1981 | FILSS | | | |
| EER | | 4,376,462 | 03/1983 | ELLIOT ET AL. | 166 | 267 | |
| FFR | | 4,392,959 | 07/1983 | COILLET | | | |
| GGR | | 4,424,858 | 01/1984 | ELLIOT ET AL. | 166 | 52 | |
| HHR | | 4,643,832 | 02/1987 | INIOTAKIS ET AL. | | | |
| IIR | | 4,652,375 | 03/1987 | HEILWEIL ET AL. | | | |

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

| | | |
|--------------------------------|--------|-----------------|
| Atty. Dkt. No. | M# | Client Ref. |
| | 305363 | |
| Applicant: MAX et al. | | |
| Appln. No.: New/Herewith | | |
| Filing Date: September 8, 2003 | | |
| Examiner: | | Group Art Unit: |

Date: September 8, 2003

Page 2 of 4

| | | | |
|------|--------------|---------|---------------------|
| JJR | 4,670,159 | 06/1987 | GARRETT ET AL. |
| KKR | 4,678,583 | 07/1987 | WILSON, III, ET AL. |
| LLR | 4,686,833 | 08/1987 | HINO ET AL. |
| MMR | 4,696,338 | 09/1987 | JENSEN ET AL. |
| NNR | 4,718,242 | 01/1988 | YAMAUCHI ET AL. |
| OOR | 4,767,527 | 08/1988 | INIO TAKIS ET AL. |
| PPR | 4,821,794 | 04/1989 | TSAI ET AL. |
| OQR | 5,037,555 | 08/1991 | PASTERNAK ET AL. |
| RRR | 5,055,178 | 10/1991 | SUGIER ET AL. |
| SSR | 5,076,934 | 12/1991 | FENTON |
| TTR | 5,110,479 | 05/1992 | FROMMER ET AL. |
| UUR | 5,128,042 | 07/1992 | FENTON |
| VVR | 5,159,971 | 11/1992 | CHIEN C. LI |
| WWR | 5,167,838 | 12/1992 | WILENSKY |
| XXR | 5,304,356 | 04/1994 | IIJIMA ET AL. |
| YYR | 5,362,467 | 11/1994 | SAKAI ET AL. |
| ZZR | 5,364,611 | 11/1994 | IIJIMA ET AL. |
| AAAR | 5,397,553 | 3/1995 | SPENCER ET AL. |
| BBBR | 5,444,986 | 08/1995 | HINO |
| CCCR | 5,448,892 | 09/1995 | CHENG |
| DDDR | 5,473,904 | 12/1995 | GUO ET AL. |
| EEER | 5,497,630 | 03/1996 | STEIN ET AL.. |
| FFFR | 5,512,176 | 04/1996 | BLAIR |
| GGGR | 5,553,456 | 09/1996 | MCCORMACK |
| HHHR | 5,562,891 | 10/1996 | SPENCER ET AL. |
| IIIR | 5,660,603 | 08/1997 | ELLIOT ET AL. |
| JJRR | 5,679,254 | 10/1997 | CHAKRABARTI |
| KKKR | 5,816,057 | 10/1998 | DICKEY ET AL. |
| LLR | 5,873,262 | 02/1999 | MAX ET AL. |
| MMMR | 6,028,234 | 02/2000 | HEINEMANN ET AL. |
| NNNR | 6,089,022 | 07/2000 | ZEDNIK ET AL. |
| OOR | 6,106,595 | 08/2000 | SPENCER |
| PPPR | 6,112,528 | 09/2000 | RIGBY |
| QQQR | 6,158,239 | 12/2000 | MAX ET AL. |
| RRRR | 6,180,843 B1 | 01/2001 | HEINEMANN ET AL. |
| SSSR | 6,245,955 B1 | 06/2001 | SMITH |
| TTTR | 6,296,060 B1 | 10/2001 | MCCASLIN |

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

| | | |
|--------------------------------|---|---|
| Atty. Dkt. No. | M# | Client Ref. |
| | 305363 | |
| Applicant: MAX et al. | | |
| Appn. No.: New/Herewith | | |
| Filing Date: September 8, 2003 | | |
| Date: September 8, 2003 | Page <input type="text" value="3"/> of <input type="text" value="4"/> | Examiner: <input type="text"/> Group Art Unit: <input type="text"/> |

| FOREIGN PATENT DOCUMENTS | | | | | | English Abstract | Translation Readily Available | | |
|--------------------------|-----------------|--------------|---------|------------------------------|--|------------------|-------------------------------|---------|----|
| | Document Number | Date MM/YYYY | Country | Inventor Name | | Enclosed | No | Enclose | No |
| UUUR | GB1 320 134 GB | 06/1973 | GB | Webber et al. | | X | | X | |
| VVVR | JP11319805 | 11/1999 | Japan | O Yoshio | | X | | | X |
| WWWR | JP2000202444 | 07/2000 | Japan | Akine | | X | | | X |
| XXXR | JP55055125 | 04/1980 | Japan | Kimura et al. | | X | | | X |
| YYYR | JP58109179 | 06/1983 | Japan | Fuchigami et al. | | X | | | X |
| ZZZR | JP59029078 | 02/1984 | Japan | Futami et al. | | X | | | X |
| AAAAR | JP61025682 | 02/1986 | Japan | Iwasaki et al | | X | | | X |
| BBBBR | SU1006378 | 03/1983 | Russia | Smirnov et al. | | X | | | X |
| CCCCR | SU997715 | 02/1983 | Russia | Denisov et al. | | X | | | X |
| DDDDR | WO 01/04056 | 01/2001 | PCT | MAX (with substitute sheets) | | X | | X | |
| EEER | WO01/34267A1 | 05/2001 | PCT | Gougef | | X | | X | |

| | |
|--|------------------|
| Examiner | Date Considered: |
| *EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. | |

| | | |
|-------------------|--------|-------------|
| Atty. Dkt. No. | M# | Client Ref. |
| | 305363 | |

**INFORMATION DISCLOSURE STATEMENT
 BY APPLICANT**

Date: September 8, 2003

Page 4 of 4

Applicant: MAX et al.

Appn. No.: New/Herewith

Filing Date: September 8, 2003

Examiner: Group Art Unit:

| OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.) | | | | |
|---|---|---|--|---|
| FFFFR | EPO - Patent Abstracts of Japan, Publication No. 61136481, Publication date 24-06-86, Muneshichi, Concentration of Aqueous Solution English language abstract. | | | |
| GGGGR | Japanese Abstract, Journal Number: G0941AAK ISSN No: 0453-0683, 1995, vol. 42, No. 7. Accession Number: 95A0492545, File segment: JICST-E | | | |
| HHHHR | Max and Chandra, "The Dynamic Oceanic Hydrate System: Production Constraints and Strategies," Offshore Technology Conference, Paper No. 8684, pp. 1-10 (1998). | | | |
| IIIR | Max and Dillon, "Oceanic Methane Hydrate: The Character of the Blake Ridge Hydrate Stability Zone, and the Potential for Methane Extraction," <u>Journal of Petroleum Geology</u> , Vol. 21(3), July 1998, pp. 343-357 | | | |
| JJJJR | Max, M.D., "Oceanic Methane Hydrate: The Character of the Blake Ridge Hydrate Stability Zone, and the Potential for Methane Extraction," Author's correction, <u>Journal of Petroleum Geology</u> , Vol. 22(2), pp. 227-228 (April 1999). | | | |
| KKKKR | Max and Lowrie "Oceanic Methane Hydrate Development: Reservoir Character and Extraction," <u>Naval Research Laboratory</u> (NRL), OTC 8300, pp. 235-240. | | | |
| LLLLR | Max and Lowrie, "Oceanic Methane Hydrates; A "Frontier" Gas Resource", <u>Journal of Petroleum Geology</u> , Vol. 19(a), pp. 41-56 (January 1996) | | | |
| MMMMR | Max et al., "Extraction of Methane from Oceanic Hydrate System Deposits", Offshore Technology Conference, Paper No. 10727, pp. 1-8 (1999) | | | |
| NNNNR | Max et al., "Methane-Hydrate, A Special Clathrate: Its Attributes and Potential," <u>Naval Research Laboratory</u> , NRL/MR/6101-97-7926, pp. 1-74 (February 28, 1997) | | | |
| OOOOR | Mel'nikov et al. Russian Abstract Publication No. 2166348, May 10, 2001, | X | | X |
| PPPPR | Rautenbach et al., Entwicklung und Optimierung eines Hydrat-Verfahrens zur Meerwasserentsalzung, <u>Chemie-Ing.-Techn</u> 45 jahrg. 1973/Nr. 5, pp. 259-254. | | | |
| QQQQR | Seliber, Methane Cooled Desalination Method and Apparatus, USPTO, Defensive Publication T939, 007 – Published October 7, 1975 | | | |
| RRRRR | XP-00213497 SU1328298 English language abstract. | X | | |

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.